		Procedure No.	2510
California ISO	Operating Procedure	Version No.	10.0
		Effective Date	7/01/24
NERC and CAISO Tagging Requirements		**Distribution Restriction: None**	

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Purpose

Provides details of E-Tagging Interchange Schedule transactions and validating them with California ISO (CAISO) Market Awards to all applicable entities.

1. Responsibilities

WECC Interchange Tool (WIT)	The WIT, or successor electronic confirmation tool, in accordance with WECC Criterion, will serve as the primary means for confirmation and will be treated as the final record of NSI and NAI under normal operating conditions.
CAISO System Operator	The CAISO validates Interchange transactions and confirms them with adjacent Balancing Authorities (BA) prior to implementing them in the ACE equation. Additionally, the CAISO assesses Interchange transaction for reliability purposes, adequacy of transmission rights, and ensures market awards are not exceeded prior to E-Tag implementation. The CAISO uses the Interchange transaction scheduler (ITS) software to process E-Tags, and when necessary, curtail E-Tags that do not pass validation or meet requirements. The CAISO complies with NERC/NAESB Standards and WECC Criterion and business practices related to Interchange and implements Confirmed Interchange from valid E-Tags.
Balancing Authority (BA)	In accordance with NERC/NAESB standards and WECC Criterion, BAs will take action on Arranged Interchange requests based upon reliability considerations. Additionally, BAs will implement confirmed Interchange and "sending" and "receiving" BAs will agree to Interchange prior to implementing it in their ACE equation.
Transmission Service Provider (TSP)	In accordance with NERC/NASEB standards and WECC Criterion, TSPs will take action on a received Arranged Interchange request.
Scheduling Coordinator (SC)	SCs are entities certified by the CAISO for the purposes of undertaking functions specified in the CAISO Tariff. This includes ensuring Interchange Schedules are prepared in accordance with NERC, WECC, and CAISO requirements and providing E-Tags for all applicable transactions. However, SC's are not specifically identified in NERC/NAESB and WECC standards, and might not meet the strict definition of a Purchasing Selling Entity (PSE) as defined in the NERC Glossary of Terms. As such, the SC is responsible for ensuring their transactions are properly tagged by a PSE, as SCs must be awarded CAISO market bids and Self-Schedules on all tags for validation purposes. Failure to satisfy these CAISO/NERC/NAESB tagging requirements may result in refusal by the CAISO to implement the Interchange Schedule, irrespective of CAISO Market Awards.

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2. Scope/Applicability

2.1. Background

Interchange Schedules are Energy Schedules where Energy is transferred between Balancing Authority Areas and they require coordination between multiple entities. The primary method for providing this coordination is the E-Tag. Various entities can communicate important information pertaining to the Interchange transaction to each other via the internet using computer applications, which are based on the E-Tag specifications and schema maintained by the North American Energy Standards Board (NAESB). A PSE can communicate Interchange transaction information to reliability entities using E-Tags, including Balancing Authorities such as the CAISO. Similarly, a reliability entity can communicate reliability limits on Interchange transactions to PSEs and other reliability entities using E-Tags. E-Tags should be prepared by PSEs in accordance with NERC/NAESB, WECC, and CAISO requirements to facilitate effective operations between Balancing Authority Areas within the Western Interconnection. A detailed discussion on the theoretical and practical application of Interchange transactions and the use of E-Tags can be found in the references.

2.2. Scope/ Applicability

This procedure applies to SCs/PSEs and all other entities responsible for E-Tagging CAISO import and export Interchange Schedules.

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3. Procedure Detail

3.1. NERC Tagging Requirements

3.1.1. E-Tagging Requirements

The following describes the requirements for submitting an E-Tag per NERC/NAESB and WECC requirements:

Scheduling Coordinator (SC), Purchasing-Selling Entity (PSE)

1. **Create E-Tags** for all Interchange Schedules.
    • **Tag** all Interchange market awards.
        o The responsible SC/PSE <u>must</u> **submit** an E-Tag to physically schedule energy or capacity delivery.
2. **Perform** the following for all Dynamic Schedules:
    • **Tag** all Dynamic Schedules **with** the expected hourly MW profile, **using** the average of each 15-minute interval award, for the next scheduling hour.
    • **Update** all Dynamic Schedule E-Tags where the average energy profile in an hour is greater than 250 MW and in that hour the actual hourly integrated energy deviates from the hourly average energy profile indicated on the tag by more than ±10%.
    • **Update** all Dynamic Schedule E-Tags where the average energy profile in an hour is less than or equal to 250 MW and in that hour the actual hourly integrated energy deviates from the hourly average energy profile indicated on the tag by more than ±25 megawatt-hours.
    • **Update** all Dynamic Schedule E-Tags that the Reliability Coordinator or Transmission Operator determines the deviation, regardless of magnitude, to be a reliability concern and notifies the Purchasing-Selling Entity of that determination and the reasons.
    • **Update** each hour of a Dynamic Schedule **with** the actual value <u>within 60 minutes</u> of the completion of the operating hour to allow for correct Net Scheduled Interchange between BAs.
    • **Monitor** Dynamic Schedule E-Tags for reliability curtailments <u>and</u> **make adjustments** to the dynamic signal accordingly.
        o After a reliability curtailment has been initiated and subsequently released,
            ▪ **Release** the reliability limit profile on the appropriate E-Tag at the time the reliability event allows for the reloading of the transaction, **without releasing** the reliability limit of other Balancing Authorities and Transmission Service Providers.

Scheduling Coordinator (SC), Purchasing-Selling Entity (PSE)
▪ The current level on the E-Tag shall not be greater than the most limiting reliability limit.   - It may be necessary to **create** an outage card in the outage management system to ensure the Real-Time Market does not give the resource a DOT greater than the reliability curtailment limit.   **Submit** all intra-hour dynamic E-Tags <u>at least 20 minutes before</u> the operating hour. *Note: The Transmission profile, shown on the tag, should reflect the expected maximum MW usage, for the Dynamic Schedule, for the hour.* *Note: The Energy profile of the Dynamic Schedule must be updated with the final integrated Energy amount (MWh), as predetermined by a single, agreed-upon source, within 60 minutes after the completion of the Operating Hour.*   3. **Tag** all pseudo tie Energy transactions. Pseudo Tie E-Tags will follow the same criteria as Dynamic Tag Types. *Note: These requirements apply to both static and dynamic transfers.*

3.1.2. E-Tag Submittal Timelines

The following E-Tag submission timelines must be adhered to:

Purchasing-Selling Entity (PSE)
1. **Submit** E-Tags on time to comply with NERC/WECC timetables and policies.   **See** NERC Standard INT-006-5 - Evaluation of Interchange Transactions, Attachment 1.   2. **Submit** the Intertie Hourly Energy Schedule on E-Tags by T-20 minutes. 3. **Submit** E-Tags or adjustments to E-Tags as soon as possible <u>after</u> schedules are awarded.

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3.1.3. E-Tag Evaluation and Approval

The CAISO Interchange transaction scheduler and the Transmission Dispatcher evaluate tags for the following:

Evaluation	Description
Transmission Path (valid POR/POD)	Multiple physical path transmission segments must be shown on the E-Tag, in some situations to ensure all BA Area boundaries are identified or to accommodate the Scheduling detail requirements of adjacent BAs. NAESB EIR registered transmission paths, for all Interchange Schedules (E-Tags), in coordination with adjacent BAs, shall be used. E-Tags shall contain the correct Scheduling path (proper connectivity of Adjacent Balancing Authorities).
Scheduling Entity	There shall be only one Scheduling entity per line on an E-Tag. Entries in the Scheduling entity field are considered sequential from top to bottom (source to sink) in the Scheduling entity column. For physical path rows that are adjacent to another BA Area (Intertie boundaries), the adjacent BAs must be listed sequentially.
Valid Energy Profile	The MW value in the Energy profile cannot exceed the total MW value in the reserved transmission profile, for Static Interchange Schedules, at any time. However, the transmission profile MW value can and should exceed the Energy profile for Dynamic Interchange Schedules, when reflecting the updated MW value after the hour for actual generator output when used to schedule Interchange Energy and/or Capacity (Spinning, Non-spinning or Regulation services).

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3.1.4. Tag Approval Prior to Knowledge of Final Market Schedules

The following describes tag approval prior to knowledge of final market Schedules:

CAISO Transmission Dispatcher
1. **Approve** all on-time Arranged Interchange, Reliability Arranged Adjustment Interchange or emergency Arranged Interchange within the allowed evaluation period defined in the NERC INT Standard, Attachment 1.

3.1.5. Interchange Schedule Implementation

The following describes the Interchange Schedule implementation:

Interchange and Market Award Correlation
All Interchange Schedules are subject to approval by adjacent BAs and transmission providers.
The Transmission Dispatcher may curtail E-Tags due to reliability reasons or for violation of NERC/NAESB or WECC E-Tag requirements. Invalid E-Tags may also be curtailed or adjusted to zero. Prior to the expiration of the reliability assessment period, the BA shall respond to each On-time Arranged Interchange, emergency Arranged Interchange and Reliability Adjustment Arranged Interchange to transition an Arranged Interchange to a Confirmed Interchange. If a Reliability Adjustment Arranged Interchange is denied, the Reliability Coordinator must be notified no more than 10 minutes after the denial. If a Reliability Coordinator directs the modification of a Confirmed Interchange or Implemented Interchange for actual or anticipated reliability reasons, a Reliability Adjustment Arranged Interchange schedule shall be submitted within 60 minutes of the start of the modification. In addition, if a Reliability Coordinator directs the scheduling of Interchange for actual or anticipated reliability reasons, a Request for Interchange shall be submitted within 60 minutes of the start of the Interchange Schedule.

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3.2. CAISO Tagging Requirements

3.2.1. E-Tagging Requirement for CAISO Market Schedules

The following describes the requirements for submitting an E-Tag for CAISO awarded market schedules:

Scheduling Coordinator (SC), Purchasing-Selling Entity (PSE)

1. **Create E-Tags** for all Interchange Schedules.
    • **Tag** all CAISO Interchange market awards.
        o The responsible SC/PSE <u>must</u> **submit** an E-Tag to physically schedule energy or capacity delivery.
    • **Submit** a separate E-Tag for <u>each</u> type of market award for energy, spin or non-spin.
        o Separate E-Tags <u>must</u> be made for <u>each</u> of these CAISO product types to facilitate validation of tagged Interchange with the respective market awards for energy, spinning reserves or non-spinning reserves.
        o While a single market ID may be used to bid multiple market products into the CAISO market on the interties, separate E-Tags are required to facilitate the Interchange schedule (E-Tag) validation process.
        o The CAISO's Interchange transaction scheduler compares the CAISO product type shown on the E-Tag, in the CAISO_PRODUCT Token/Value pair (ENGY, SPIN, or NSPN) with CAISO market awards to validate each E-Tagged Interchange schedule.
        o Only <u>one</u> CAISO product type can appear on each E-Tag. Transaction IDs may only have the CAISO_PRODUCT of ENGY.
 	
    • **Submit** a separate E-Tag for <u>each</u> type of transmission rights.
        o When using a single resource ID to schedule use of more than one type of transmission, for example use of both an energy bid and contract rights using a Contract Reference Number (CRN), two E-Tags <u>must</u> be used.
            ▪ This situation can occur if Energy is awarded to both an energy bid and the ETC, TOR, or CVR self-schedule with the MW allocation using a single resource ID.
            ▪ The responsible SCs PSE <u>must</u> **submit** two E-Tags,
               − One for the Energy Bid award <u>and</u>
               − One that <u>does not</u> exceed the MW limit for the ETC/TOR/CVR contractual rights, each with the same resource ID (CAISO_RES_ID Token/Value pair).

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Scheduling Coordinator (SC), Purchasing-Selling Entity (PSE)

- **Associate** an E-Tag to your CAISO market Interchange award by **following** Section 3.2.2 below.

  Note: Transactions that are entirely within the CAISO BA Area using CAISO transmission such as SC-to-SC trades are considered network transmission service and should not be tagged.

2. **Perform** Dynamic Schedule tags update per NERC/WECC standard requirements outlined in Section 3.1.1 above.

3. **Tag** all pseudo tie Energy transactions. Pseudo Tie E-Tags will follow the same criteria as Dynamic Tag Types.

4. **Tag** all Ancillary Service (AS) Capacity Schedules:

   - **Tag** Spinning and Non-Spinning reserve Interchange Capacity transactions **with** the transmission profile value awarded in the Day-Ahead Market (DAM) or RTPD.

   - **Tag** the Energy Profile at zero until the Energy is actually dispatched and delivered.

   - **Tag** the Transmission Allocation **with** firm transmission

     Note: These requirements apply to both static and dynamic transfers.

   - **Tag** regulation (Import only) Interchange transactions, at the value awarded in the CAISO AS Market. The Energy profile **should be set** at the forward Energy Schedule, **with** the additional upward, awarded regulation Capacity, shown in the total reserved transmission profile value on the tag, over and above the forward Energy Schedule.

   - **Adjust** tags for regulation, after the fact, for the actual integrated quantity of dynamically delivered regulation Energy by the next hour following the hour that the Energy was supplied.

     *Note: Dynamic Interchange Schedules – A single tag may be used for Energy and AS Awards (i.e., Upward Regulation) for Dynamic Schedules only. Reserves delivered via Dynamic Interchange Schedules **must** be on Firm Transmission Service for all lines of interest. The CAISO product type used on Dynamic tags should always be "ENGY". Place the total MW value for all market awards, Energy and Capacity, in the transmission profile, and the actual Energy award MW value in the Energy profile of the E-Tag. If awarded AS Capacity, and it is subsequently dispatched as Energy, then the dynamic E-Tag energy profile shall be updated to reflect the final integrated quantity of Energy delivered via this Dynamic Interchange Schedule, inclusive of both Energy and AS Energy as dispatched.*

3.2.2. Association of E-Tags with CAISO Market Awards

The following describes how Interchange schedules (E-Tags) are associated with the respective CAISO market awards, by the CAISO Interchange transaction scheduler:

The CAISO Interchange transaction scheduler application requires additional, specific CAISO market transmission reservation information be provided on tags, to validate the Interchange Schedule with the corresponding market award or reservation. E-Tags must reflect all physical segments used on the CAISO Controlled Grid. A market award represents the transmission reservation on the associated CAISO Intertie and associated physical segments of the scheduling path used on the CAISO Controlled Grid.

For low priority export transactions, Scheduling Coordinators for CAISO Day-Ahead and Real-Time awards of market priority type DALPT, RTLPT or RTECON for which the CAISO is responsible for the contingency reserves, shall use G-FP[1] (Generation-Firm Provisional) in the Market Path of the corresponding E-Tag. G-FP properly communicates to the sink BA that if in the event of a contingency to recover contingency reserves or in the event the CAISO is reducing these awards in HASP due to scheduling priorities in the CAISO BA, the E-Tag may be subject to adjustment based on the HASP award, or curtailment based on need following a contingency or resource deficiency in the CAISO when the CAISO is operating in an EEA. In addition, the Misc. field shall include the relevant market priority type (DALPT, RTLPT, and RTECON) as shown in the Misc. Info field table below. This information is provided by the PSE, using the Misc. Info. field for resource IDs and the transaction IDs.

This CAISO market award information allows Interchange transaction scheduler to process the timely and accurate settlement of import or export Interchange Schedules.

The Transmission Dispatcher may curtail tags down to the CAISO DAM and HASP market awards, respectively, in Interchange transaction scheduler if necessary.

---

[1] G-FP: Firm Provisional Energy. This product may be interrupted only if the interruption is within the recall time and for conditions allowed by applicable provisions governing interruption of service, as mutually agreed to by the parties. A G-FP product cannot be interrupted for economic reasons.

The following tables specify the required Market data:

Note: *Do not include quotation marks or any spacing in either Market Path, Misc. Info. field or OASIS field.*

Misc. Info. field for Resource/Transaction IDs:

CISO Tagging Template

IMPORT	CRAG to NP15

CRAG

Physical Path									
BA	**TSP**	**MO**	**PSE**	**POR**	**POD**	**Sched Entities**	**Contract**	**Misc Info**	**Loss**
	"- - -"		"- - -"	"- - -"	CRAG	PACW			
	CISO	CISO	"- - -"	CRAG	NP15	CISO		Yes	
	CISO	CISO	"- - -"	NP15	"- - -"	CISO			

Four data elements (Token/Value pairs) are required to facilitate confirmation of the market award in the form of a resource ID, as depicted below.

Misc. Info	
Token	**Value**
CAISO_CONTRACT	Contract Reference Number (CRN) used for Existing Transmission Contracts (ETC), Transmission Ownership Rights (TOR) or Converted Rights (CVR), as registered in the CAISO Master File, or "NONE" for Market Transmission.
CAISO_PRODUCT	"ENGY", "SPIN", or "NSPN"
CAISO_RES_ID	The Resource ID as registered in the CAISO Master File that is associated with the market award.
CAISO_PRIORITY_TYPE	The corresponding CAISO market priority awards types (DAPT, DALPT, RTPT, RTLPT, and RTECON); only one of these shall be used in this field without quotation marks, and do not use CRNs here.

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Sample Market Path for Low Priority Export Resource/Transaction IDs

Market Path			
PSE	**Product**	**Contact**	**Misc. Info**
XXXX	G-FP	XXXX	XXXX
XXXX	L	XXXX	XXXX

OASIS field for Transaction IDs

Transmission Allocation			
TSP	**Owner**	**Product**	**OASIS**
"-----"	"-----"	"-----"	"-----"
CISO	"-----"	"-----"	**XXXX-XXXX_XXX-XXXX-XXXX-X-X-X-XXXX**

The followings are examples to help clarify Misc. Field setup for market IDs:

Sample Misc. Info for import Resource ID with CRN_XXXX

Misc. Info	
Token	**Value**
CAISO_CONTRACT	CRN_XXXX
CAISO_PRODUCT	ENGY
CAISO_RES_ID	XXX_XXXXXX_I_F_XXXX
CAISO_PRIORITY_TYPE	ETC/TOR

Sample Misc. Info for Export Resource ID with CRN_YYYY

Misc. Info	
Token	**Value**
CAISO_CONTRACT	CRN_YYYY
CAISO_PRODUCT	ENGY
CAISO_RES_ID	XXX_XXXXXX_E_F_XXXX
CAISO_PRIORITY_TYPE	ETC/TOR

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Sample Misc. Info for import Resource ID without CRN_ID

Misc. Info	
Token	**Value**
CAISO_CONTRACT	NONE
CAISO_PRODUCT	ENGY
CAISO_RES_ID	XXX_XXXXXX_I_F_XXXX
CAISO_PRIORITY_TYPE	NONE

Sample Misc. Info for import Transaction ID

Misc. Info	
Token	**Value**
CAISO_CONTRACT	NONE
CAISO_PRODUCT	ENGY
CAISO_RES_ID	**XXXX-XXXX_XXX-XXXX-XXXX-X-X-X-XXXX**
CAISO_PRIORITY_TYPE	NONE

Sample Misc. Info for high priority DAPT export Resource ID

Misc. Info	
Token	**Value**
CAISO_CONTRACT	NONE
CAISO_PRODUCT	ENGY
CAISO_RES_ID	XXX_XXXXXX_E_F_XXXX
CAISO_PRIORITY_TYPE	DAPT

Sample Misc. Info for high priority RTPT export Resource ID

Misc. Info	
Token	**Value**
CAISO_CONTRACT	NONE
CAISO_PRODUCT	ENGY
CAISO_RES_ID	XXX_XXXXXX_E_F_XXXX
CAISO_PRIORITY_TYPE	RTPT

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Sample Market Path for High Priority Export Resource/Transaction IDs

Market Path			
PSE	**Product**	**Contact**	**Misc. Info**
XXXX	Shall not be G-FP	XXXX	XXXX
XXXX	L	XXXX	XXXX

Sample Misc. Info for low priority DALPT export Resource ID

Misc. Info	
Token	**Value**
CAISO_CONTRACT	NONE
CAISO_PRODUCT	ENGY
CAISO_RES_ID	XXX_XXXXXX_E_F_XXXX
CAISO_PRIORITY_TYPE	DALPT

Sample Misc. Info for low priority RTLPT export Resource ID

Misc. Info	
Token	**Value**
CAISO_CONTRACT	NONE
CAISO_PRODUCT	ENGY
CAISO_RES_ID	XXX_XXXXXX_E_F_XXXX
CAISO_PRIORITY_TYPE	RTLPT

Sample Misc. Info for low priority RTECON export Transaction ID

Misc. Info	
Token	**Value**
CAISO_CONTRACT	NONE
CAISO_PRODUCT	ENGY
CAISO_RES_ID	**XXXX-XXXX_XXX-XXXX-XXXX-X-X-X-XXXX**
CAISO_PRIORITY_TYPE	RTECON

Sample Market Path for Low Priority Export Resource/Transaction IDs

Market Path			
PSE	**Product**	**Contact**	**Misc. Info**
XXXX	G-FP	XXXX	XXXX
XXXX	L	XXXX	XXXX

3.2.3. E-Tag Submittal Timelines

The following E-Tag submission timelines must be adhered to:

Purchasing-Selling Entity (PSE)

1. **Submit** E-Tags on time to comply with NERC/WECC timetables and policies.
   • **See** NERC Standard INT-006-5 - Evaluation of Interchange Transactions, Attachment 1.
 	
2. **Submit** Pre-schedule E-Tags <u>by 1500</u> Pacific Prevailing Time on the day <u>prior to</u> the start of the transaction or soon after DA market publishes.
 	
3. **Submit** the Intertie Hourly Energy Schedule on E-Tags by 20 minutes and the Transmission Profile <u>by 40 minutes prior</u> to the start of the first interval of the next hour's market for the following resources:
   • Self-scheduled hourly block
   • Self-scheduled Variable Energy Resource
   • Economic hourly block bid
   • Economic hourly block single change bid
 	
4. **Submit** Transmission Profile by T-40 for Fifteen-minute market economic bid.
 	
   Note: If there is no E-Tag and hence no approved or pending transmission profile available in the market by T-40 for the FMM run that starts at T-37.5, the FMM process will limit the FMM bid in that upcoming fifteen-minute market run to 0 MW. This is because there is no transmission profile provided to the CAISO to support that fifteen-minute bid.
 	
5. **Submit** E-Tags or adjustments to E-Tags as soon as possible <u>after</u> schedules are awarded.
 	
   Note: CAISO System shall <u>not</u> auto approve E-Tags submitted after T-20 (20 minutes before the start of the relevant Operating Interval).

3.2.4. E-Tag Evaluation and Approval

The CAISO Interchange transaction scheduler and the Transmission Dispatcher evaluate tags for the following:

Evaluation	Description
Valid Source/Sink PSE Information	For tags that source or sink in CAISO BA Area, the source/sink PSE shall normally be a certified SC that has a NAESB EIR registered source or sink in the CAISO BA Area. *Note: Scheduling Coordinators may not designate the CAISO as a source or sink PSE.*
Correct Transmission Service Provider (TSP)	CISO shall be listed as the TSP for use of all CAISO grid transmission (participating transmission). Scheduled use of non-CAISO grid (non-participating transmission) within the CAISO BA Area by way of Existing Transmission Contracts (ETCs) or Transmission Ownership Rights (TORs) may show the Existing Transmission Contract Owner or the Non-Participating Transmission Owner as the transmission provider. CISO shall not be designated as a TSP for any transmission segment, unless the transmission segment is comprised of CAISO grid located within the CAISO BA Area, or for external transmission, available for Scheduled use by CAISO Market Participants, for which the CAISO has dedicated rights.
Market Operator (MO)	CISO shall be listed as the MO for all E-Tags that list CISO as the TSP. This is required for CAISO auto adjustments. E-Tags shall be denied if any MO field doesn't have CISO when CISO is the TSP.
Transmission Path (valid POR/POD)	CAISO POR's and POD's are listed in CAISO Operating Procedure 2510A POR/POD-Scheduling Path Cross Reference, along with the CAISO Interchange Scheduling points, for use when submitting Market Bids or Self-Schedules on the Interties, through SIBR. CAISO transmission service is considered as network transmission service. However, multiple physical path transmission segments must be shown on the E-Tag, in some situations to ensure all BA Area boundaries are identified or to accommodate the Scheduling detail requirements of adjacent BAs. NAESB EIR registered transmission paths, for all Interchange Schedules (E-Tags), in coordination with adjacent BAs, shall be used. E-Tags shall contain the correct Scheduling path (proper connectivity of Adjacent Balancing Authorities).

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Evaluation	Description
Scheduling Entity	There shall be only one Scheduling entity per line on an E-Tag. Entries in the Scheduling entity field are considered sequential from top to bottom (source to sink) in the Scheduling entity column. For physical path rows that are adjacent to another BA Area (Intertie boundaries), the adjacent BA must be listed sequentially next to the CAISO BA Area. This is normally done on the adjacent row above or below the CAISO transmission segment. E-Tags shall be denied if any Scheduling entity field is blank for any physical path segments within the CAISO BA Area, any physical path using CAISO transmission, or any physical path row immediately adjacent to the CAISO BA Area. Adjacent BA Areas for various point of receipt and point of deliveries are listed in CAISO Operating Procedure 2510A POR/POD-Scheduling Path Cross Reference.
OASIS Reservation	For CAISO transmission, the OASIS Reservation listed on the tag must be an exact duplicate of the Transaction ID that is submitted through the SC's portal into SIBR. The Resource ID is required in the Misc. Info. field of the Physical Path and is recommended to include in the OASIS column of the Transmission Allocation. Only one CAISO OASIS number will be accepted per line on an E-Tag. Stacking of multiple Transaction or Resource IDs is not allowed.
Valid Energy Profile	The MW value in the Energy profile cannot exceed the total MW value in the reserved transmission profile, for Static Interchange Schedules, at any time. However, the transmission profile MW value can and should exceed the Energy profile for Dynamic Interchange Schedules, when reflecting the updated MW value after the hour for actual generator output when used to schedule Interchange Energy and/or Capacity (Spinning, Non-spinning or Regulation services). The CAISO shall only confirm Arranged Interchange that it has the ability of generation to Ramp prior to the expiration of that scheduled reliability assessment period.

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Evaluation	Description
Product Code	The CAISO shall <u>not</u> accept E-Tags for ten-minute recallable reserve transactions (i.e., transactions with a WECC energy product code of "C-RE"), unless the E-Tag is associated with delivery of emergency assistance Energy between another Balancing Authority Area and the CAISO Balancing Authority Area.

Note: The CAISO is registered in the NAESB registry as "CISO" in the BA, MO & TSP capacities.

3.2.5. Existing Transmission Contract Curtailments

During an emergency condition or real-time intertie derate, the Interchange Transaction Scheduler or CAISO Transmission Dispatcher shall automatically or manually curtail is scheduled in excess of their transmission contracts rights if any exist on the relevant intertie in addition to the pro rata curtailment of non-contract E-Tags.

3.2.6. Export Low Priority Type E-Tags validation

Scheduling Coordinators are required to E-Tag the following low market priority types are G-FP through the use of the Market Path (Product Field): DALPT, RTLPT, and RTECON.

- If DALPT, RTLPT and RTECON related E-Tags are not tagged G-FP, they shall be denied.

Scheduling Coordinators are required to E-Tag the following high market priority types as non-G-FP through the use of the Market Path (Product Field): DAPT, RTPT.

- If DAPT, RTPT related E-Tags are tagged G-FP, they shall be denied.

Scheduling coordinators for ETC and TOR, shall include the CRN # in the CAISO_CONTRACT in the Misc. Info field of the physical Path.

- If ETC or TOR related E-Tags are tagged G-FP, they shall be denied.

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Sample Misc. Info for Export Resource ID with CRN_ID equal to "NONE"

Misc. Info	
Token	**Value**
CAISO_CONTRACT	NONE
CAISO_PRODUCT	ENGY
CAISO_RES_ID	XXX_XXXXXX_E_F_XXXX
CAISO_PRIORITY_TYPE	CRN/TOR

3.2.7. Low Priority Type Export E-Tag Curtailments

Interchange Transaction Scheduler or the Transmission Dispatcher shall perform pro-rata curtailment of operator-identified MW. The operator or system shall curtail the operator-identified/filtered exports, without overloading the scheduling limits in the import direction. The following is the default curtailment listed in order from lowest to highest priority:

- RTECON
- RTLPT
- DALPT

Note: During emergency conditions, the order above may be subject to operator judgement and consistent with good utility practice.

3.2.8. Tag Approval Prior to Knowledge of Final Market Schedules

The following describes tag approval prior to knowledge of final market Schedules:

CAISO Transmission Dispatcher
Note: NERC tagging timelines allow submittal of tags <u>prior to</u> the CAISO publishing of final DAM and the Hour-Ahead Scheduling Process (HASP) awards or Real-Time Pre-Dispatch (RTPD).   1. **Approve** all on-time Arranged Interchange, Reliability Arranged Adjustment Interchange or emergency Arranged Interchange within the allowed evaluation period defined in the NERC Standard.   *Note: This may require the CAISO to approve or deny an E-Tag prior to knowing the final market results.*   2. **Approve** tags following validation of all <u>Section 3.1.4</u> requirements.

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Scheduling Coordinator (SC)
1. After the CAISO publishes its market results, **adjust** the E-Tag according to the published market award, as needed.

3.2.9. Tag Approval After the Knowledge of Final Market Schedules

The following describes tag after the knowledge of final market Schedules:

CAISO Transmission Dispatcher
1. Interchange Transaction Scheduler or the Transmission Dispatcher shall not approve E-Tags submitted after T-20 NERC timeline.

Scheduling Coordinator (SC)
1. After the CAISO publishes its market results, **adjust** the E-Tag according to the published market award, as needed.
Note: SC should make their best effort to submit new E-Tags or adjustments to E-Tags on time based on the NERC and NAESB business practice. Late E-Tags will be denied by the Interchange Transaction Scheduler or the CAISO Transmission Dispatcher.

3.2.10. Emergency Tags

The following describes emergency tags:

The "emergency" transaction type E-Tag is only used for tags at the request of the Transmission Dispatcher or in response to an operational message from the CAISO.

The CAISO may request or allow the use of an emergency transaction type E-Tag in the event an Import or Export Schedule is required after normal Scheduling timelines and the transaction is in response to a loss of transmission, potential reserve or Energy deficiency, to supply or receive emergency assistance to another BA Area during a contingency event, or at the request of the RC.

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The emergency transaction type E-Tag is not used nor requested by the CAISO for economic purposes or to expedite approval for a market transaction.

CAISO Transmission Dispatcher

Respond to emergency transaction type E-Tags:
 	
When the CISO is the Sink Balancing Authority, before taking action:
 	
1. **Ensure** the emergency transaction type E-Tag request is an actual or anticipated condition of:
    a) Loss of generation
    b) Loss of transmission (includes stranded load)
    c) Loss of resource due to transmission constraint
    d) Inadequate reserves
    e) At the request of the RC
 	
2. If the <u>valid</u> tag meets the actual or anticipated conditions,
    • **Approve** the tag within the defined timeframe in the NERC standard <u>and</u>
    • **Complete** required log entries that include the condition(s) met.
 	
3. If the <u>valid</u> tag doesn't meet the actual or anticipated conditions,
    • **Deny** the tag within the defined timeframe in the NERC standard <u>and</u>
    • **Complete** required log entries.
 	
When CISO is the Source Balancing Authority, before taking action:
 	
4. **Determine** if the <u>valid</u> emergency transaction type E-Tag request that is <u>not</u> on time will jeopardize CAISO system conditions.
 	
    Note: Verify with the Manager of Real-Time Operations/Generation Dispatcher and make sure the Manager of Real-Time Operations approves if approving the tag will put the CAISO in an EEA.
 	
When CISO is the Sink or Source Balancing Authority:
 	
5. **Ensure** any <u>invalid</u> emergency transaction type E-Tag requests that meet the acceptable emergency conditions is denied <u>and</u> **communicate** to the tag author how to make the tag valid.

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3.2.11. Interchange Schedule Implementation

The following describes the Interchange Schedule implementation:

Interchange and Market Award Correlation
Tag approval by the CAISO does not guarantee a CAISO market award/Transmission reservation.
All market import or export Interchange Schedules are subject to final approval and transmission allocation in the CAISO DA, or HASP and RTPD Energy markets.
All Interchange Schedules are subject to approval by adjacent BAs and transmission providers.
The Transmission Dispatcher may curtail E-Tags due to reliability reasons or for violation of NERC/NAESB, WECC, or CAISO E-Tag requirements. Invalid E-Tags may also be curtailed or adjusted to zero. Prior to the expiration of the reliability assessment period, the CAISO shall respond to each On-time Arranged Interchange, emergency Arranged Interchange and Reliability Adjustment Arranged Interchange to transition an Arranged Interchange to a Confirmed Interchange. If a Reliability Adjustment Arranged Interchange is denied by the CAISO, the Reliability Coordinator must be notified <u>no more than 10 minutes</u> after the denial. If a Reliability Coordinator directs the modification of a Confirmed Interchange or Implemented Interchange for actual or anticipated reliability reasons, a Reliability Adjustment Arranged Interchange schedule shall be submitted <u>within 60 minutes</u> of the start of the modification. In addition, if a Reliability Coordinator directs the scheduling of Interchange for actual or anticipated reliability reasons, a Request for Interchange shall be submitted <u>within 60 minutes</u> of the start of the Interchange Schedule.
Transmission Dispatcher shall log all instances of tag curtailments due to reliability reasons.

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Source/sinks representing CAISO market as a whole
Historically, E-Tags for Interchange schedules with the CAISO market have used a source or sink of either "NP15" or "SP15", which represent the CAISO's end of interties into Northern or Southern California. Because these sources and sinks have created uncertainty in some cases concerning the usage of these designations, the CAISO has established source/sink registrations of "CISOSYS.NP15" and "CISOSYS.SP15" to represent transactions with the CAISO market as a whole rather than delivery to specific loads, for optional use as the source or sink of an E-Tag. Upon request by a market participant to its client representative, the CAISO will register the use of CISOSYS.NP15 or CISOSYS.SP15 as a source or sink for that market participant. When the responsible PSE then uses CISOSYS.NP15 or CISOSYS.SP15 as a source or sink, the E-Tag must include a transmission segment linking it with either a POR/POD of NP15 or SP15, as either the first or last transmission segment in addition to the transmission path that would otherwise be stated in the E-Tag. For example, in the CISO Tagging Template illustrated above, for the transmission segment from CRAG to NP15 the sink would then be CISOSYS.NP15 instead of NP15. When a PSE is associated with the source or sink at CISOSYS.NP15 or CISOSYS.SP15, it is understood that the PSE does not become directly responsible for owning or operating generation, or serving end-use customers, but rather is responsible for transactions with the CAISO market as provided through the CAISO tariff.

3.2.12. Dynamic or Pseudo Tie Energy at an alternate Intertie

Scheduling Coordinator (SC), Purchasing-Selling Entity (PSE)

1. Scheduling of Dynamic or Pseudo Tie Energy at an alternate Intertie.
   • Pursuant to Section 1.4.3 of the CAISO's Dynamic Schedule protocol (Appendix M to the CAISO Tariff), the CAISO may allow a change in the "pre-established association of the Dynamic System resource with a particular Intertie".
   • Pursuant to Section 1.2.1.2 of the CAISO's pseudo-tie protocol (Appendix N to the CAISO Tariff), a pseudo-tie generating unit **must transfer** dynamically its entire output at one associated pre-determined CAISO Intertie, <u>and</u>
      o The unit "<u>must be</u> permanently **associated** with a particular pre-determine CAISO Intertie."
      o Pseudo-tie generating units may **propose** changes to include an alternate Intertie to be used in the event their primary associated Intertie is <u>not</u> available.
         ▪ To propose an alternate designated Intertie for a dynamic or pseudo tie resource, <u>eleven (11) business days advanced notice are necessary</u> (e.g., for planned line outages). To do so, **submit** a CIDI ticket <u>and</u> **select** the

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Scheduling Coordinator (SC), Purchasing-Selling Entity (PSE)
'Onboarding and Maintenance' record type to **request** an alternate intertie.

- The CAISO will review the alternate tie request and update the Master File to allow the market to recognize and grant awards at the alternate designated Intertie.

Note: For Dynamic Resources changes to the Master File can be made only in increments of 24 hours and E-Tags at the alternate interties must be done in 24 hours increments.

- The dynamic or pseudo-tie generating unit <u>must</u> therefore **tag** at their alternate designated Intertie.
- Dynamics reverting to a previous associated Intertie <u>must</u> **go through** the same Master File change process described above.

4. Supporting Information

Operationally Affected Parties

Shared with the Public.

References

Resources studied in the development of this procedure and that may have an effect upon some steps taken herein include but are not limited to:

CAISO Tariff	
CAISO Operating Procedure	
NERC Requirements	BAL-005-1 INT-006-5
WECC Criterion	INT-007-WECC-CRT-4 WR2 INT-008-WECC-CRT-3.2 WR7 INT-021-WECC-CRT-3

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Other References	NAESB Standard: WEQ-004
	NAESB WEQ Electronic Tagging - Functional Specification

Definitions

Unless the context otherwise indicates, any word or expression defined in the Master Definitions Supplement to the CAISO Tariff shall have that meaning when capitalized in this Operating Procedure.

The following additional terms are capitalized in this Operating Procedure when used as defined below:

None.

Version History

Version	Change	Date
8.4	Section 3.1.6: Clarified the beginning paragraph and added the new ISO Interchange Scheduling Desk tasks.	5/24/18
	Section 4: Updated from INT-007-WECC-CRT-2.2 WR2 to current version of INT-007-WECC-CRT-3 WR2.	
	Minor formatting and grammar updates throughout.	
	Replaced Peak RC with the RC.	
	Removed version history prior to 3-years.	
9.0	Periodic Review:	12/09/19
	Responsibilities section: Updated WIT reference from NERC standards to WECC Criterion and removed the long time thought that WIT performs validations. NAESB E-Tag spec for tag authority software perform validations but not specifically WIT. Updated ISO System Operator by replacing Interchange Authority with valid E-Tag, which complies with NAESB E-Tag specifications. NERC and WECC no longer uses the term, "Interchange Authority".	
	Section 1: changed Western Interchange Tool (WIT) to WECC Interchange Tool (WIT), to match the name on the WIT application and WECC documentation.	
	Section 3.1.1, #2: Changed sentence from: Tag all Dynamic Schedules at the expected average MW profile for each 15-min. interval of the next scheduling hour. To this: Tag all Dynamic Schedules with the expected hourly MW profile, using the average of each 15 minute interval award, for the next scheduling hour.	

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Operating Procedure	Procedure No.	2510
	Version No.	10.0
	Effective Date	7/01/24

California ISO

NERC and CAISO Tagging Requirements

Distribution Restriction: None

Version	Change	Date
	Sections 3.1.2, 3.1.4, 3.1.6 and 3.1.7: Changed Interchange Scheduler to Transmission Dispatcher. Section 3.1.3: Updated to clarify E-Tags submittal deadlines. Section 3.1.4: Clarified and corrected validations in Description column. References section: Updated WECC Criterion to include the criterion that used to be in the NERC Standards section and updated their version numbers. Removed NERC Interchange Reliability Guideline, as it has been retired and NAESB WEQ-004 takes its place. Updated various sections to include necessary information from E-Tagging Your CAISO Market Awards document on caiso.com so the document can be retired. This includes extra information regarding Misc. Info. and Transmission Allocation requirements and sources/sinks representing ISO market as a whole. Added 2510B ISO Tagging Templates, which was a copy of California ISO Tagging Templates from the CAISO public website, which was removed. Minor formatting and grammar updates.	
9.1	Appendix: Added 2510C Allowable Tag and Market Award Combinations. Remove "the RC" from Operationally Affected Parties. Minor format and grammar updates.	8/12/20
9.2	Section 3.1.3: Changes to tag submission timing for IDS implementation. References: Updated NERC/WECC Standards, removed those retired. Replaced ISO with CAISO in most instances throughout. Minor format and grammar updates.	2/12/21
9.3	Periodic Review: Section 3.1.5: Updated per 2022 review of INT-006-5 RSAW to align CAISO Operating Procedure 2510 with the validation process. Updated WECC Standard INT-021-WECC-CRT-3. Updated title of reference to 2510B under Appendix. Minor formatting and grammar edits.	12/13/22
9.4	Section 3.1.2: Updated to include new Market Priority Types and Market Path. References: Updated WECC Standard reference. Minor formatting and removed history prior to five years.	7/01/23
9.5	Section 3.1.1: Updated E-Tagging Requirements to include process change for the submittal of alternate Intertie request. Section 3.1.3: Minor update to Item #5. Section 3.1.5: Updated from CAISO Transmission "Desk" to "Dispatcher" for task table title.	8/17/23

Version	Change	Date
	Updated one instance of ISO to CAISO, minor formatting and grammar edits.	
9.6	Section 3.1.6, Item #4, Note: Updated Shift Manager to Manager of Real-Time Operations.	9/11/23
9.7	Section 3.1.3: Updated by clarifying the T-20 NERC E-Tag approval deadline for the California ISO. Added new Section 3.1.6 to clarify the T-20 deadline after knowledge of the final market schedules.	11/15/23
10.0	Major Update to include Resource Sufficiency Evaluation Enhancement 2 track 2 changes as follow: Split the procedure into two sections, Section 3.1 NERC validation and timelines and Section 3.2 CAISO validation and timelines. Updated Section 3.2 to include Subsections 3.2.5 Existing Transmission Contract Curtailments, Subsection 3.2.6 Export Low Priority Type E-Tags validation, and Subsection 3.2.7 Export Low Priority Type E-Tags Curtailments. Minor formatting and grammar edits.	7/01/24

5. Periodic Review Procedure

Review Criteria & Incorporation of Changes

There are no specific criteria for reviewing or changing this document, follow instructions in CAISO Operating Procedure 5510.

Frequency

Every three (3) Years.

Appendix

2510A POR/POD-Scheduling Path Cross Reference
2510B CAISO Tagging Templates
2510C Allowable Tag and Market Award Combinations